Rejections under 35 U.S.C.§ 103

The Examiner has maintained the rejections based on obviousness against Claims 1-17 as being unpatentable over either of Inouye et al. (U.S. Patent 5,320,958 or U.S. Patent 5,434,070) in view of the combination of Rice et al. (July 1993), Xiong et al. (1990) and Hsu et al. (April 1992).

It is the Applicants' intention to swear behind the publication by Rice et al. Applicants maintain that Rice et al. is not prior art because the invention, as embodied in the claims, had been reduced to practice prior to the publication of Rice et al. in July 1993 by the Journal of Bacteriology. Applicants attach herewith a declaration pursuant to 37 C.F.R. §131. By this submission, Applicants have sworn behind the Rice et al. reference and respectfully request that the § 103 rejection in view of Rice et al. be withdrawn.

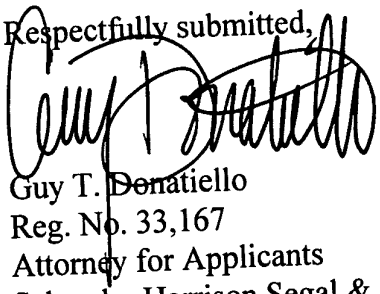
The present application is a continuation of U.S. Patent Application Serial No. 08/269,118 filed June 30, 1994. Thus, U.S. Patent 5,434,070, issued July 18, 1995, is not prior art against this application. Applicants submit herewith a declaration that the invention disclosed and claimed in the present application was conceived prior to June 14, 1994, the issue date of U.S. Patent 5,320,958. Further, the present application claims priority from the applications which issued as the '070 and '958 patents. Thus, these patents are not prior art against the present application.

As the sole prior art rejection relies on either the '070 or the '958 patents and since neither is applicable as prior art to the present application, the claims of this application are clearly allowable over the remaining prior art, and early and favorable notification to that effect is earnestly solicited.

Conclusion

With the foregoing, Applicants believe that all outstanding issues have been addressed and the application is now in condition for allowance. Applicants respectfully request favorable consideration.

Respectfully submitted,



Guy T. Donatiello
Reg. No. 33,167
Attorney for Applicants
Schnader Harrison Segal & Lewis LLP

GTD:swy
(215) 751-2463

Version with Markings Showing Changes to the Claims

17. (Twice Amended) The isolated and purified bacterial reverse transcriptase (RT) of claim 13 which RT has in the following order starting from N- to the C- terminus, ~~a first amino acid sequence of Tyr-Xaa-Asp-Asp SEQ ID: 50, where Xaa is alanine or cysteine, a second sequence of Ser-Xaa1-Xaa2-Xaa3 SEQ ID: 51, wherein Xaa1 is a hydrophobic residue selected from the group consisting of valine, phenyalanine, leucine and isoleucine, Xaa2 is a polar residue selected from the group consisting of threonine, asparagines, lysine and serine, and Xaa3 is a hydrophobic residue selected from the group consisting of tryptophan, phenylalanine and alanine, a third amino acid sequence of Asn-Xaa4-Xaa5, where Xaa4 is a hydrophobic residue selected from the group consisting of alanine, leucine and phenylalanine and Xaa5 is a hydrophobic residue selected from the group consisting of leucine, valine and isoleucine, and a fourth amino acid sequence of Xaa6-Val-Thr-Gly SEQ ID 52, where Xaa6 is a polar residue selected form the group consisting of arginine, lysine, glutamic acid, glutamine and valine~~ an amino acid sequence of Asn-Xaa1-Xaa2, where Xaa1 is a hydrophobic residue selected from the group consisting of alanine, leucine and phenylalanine and Xaa2 is a hydrophobic residue selected from the group consisting of leucine, valine and isoleucine, an amino acid sequence of Ser-Xaa3-Xaa4-Xaa5 SEQ ID: 51, wherein Xaa3 is a hydrophobic residue selected from the group consisting of valine, phenyalanine, leucine and isoleucine, Xaa4 is a polar residue selected from the group consisting of threonine, asparagines, lysine and serine, and Xaa5 is a hydrophobic residue selected from the group consisting of tryptophan, phenylalanine and alanine, an amino acid sequence of Tyr-Xaa5-Asp-Asp SEQ ID: 50, where Xaa5 is alanine or cysteine, amino acid sequence of Xaa6-Val-Thr-

Gly SEQ ID 52, where Xaa6 is a polar residue selected form the group consisting of arginine, lysine, glutamic acid, glutamine and valine.